

Devils Slide Chronology M/029/001

- Nov 9, 1976 Site inspection - Ron Daniels and Brian Buck
Noted location and process being used, vegetation and soils. Also stated that Ideal was experimenting with revegetation programs and was working on reclamation plan.
- Nov 16, 1976 Suggested species for seeding site from Ron Daniels
- Jun 16, 1977 Notice of Intent - 256.4 acres in mining and 7.6 acres of access roads - 264 total
Reclamation plan - included a 4 page description of mining and geology. Noted that Quarry 1 still had reserves that would be mined in the future. Quarry 2 was opened in the '50s and quarry 3 was on an adjacent west of #2. Reserves for ~50 years - Roads built as needed
Soil sparse but if encountered would be removed, stockpiled and used for cover. Entire 264 acres reported as affected. Alternatives to soil may be suggested in future.
- July 28, 1978 Letter to comply with M-10 Reclamation Standards as interpreted by Ideal.
Slopes - discard pile to remain at angle of repose (35 degrees)
Highwalls - would be left when stable material is encountered.
Revegetation - Soil or substitute not currently available.
Dams - **An area of 6 acres being add for electrical precipitator pelletizer equipment. Total disturbed 270 acres**
Variance Request - use of draws for unusable materials
Exclude plant buildings from "affected land"
- Jan 30, 1985 Letter from Ideal questioning filing annual reports - stating that approval of June 16, 1977 notice of intent had not been received. DOGM stated that dept had been occupied with coal operation and Ideal could wait for further notice.
- Feb 15, 1985 Letter from Ron Daniels stating that annual reports should be filed and marked "operation not approved, for information only."
- No Date Annual report from July 1, 1977 to Dec 31, 1984 - 27.9 acres of pit and 9.3 acres of waste dump - 396 acres affected - 148.5 disturbed, all disturbed areas considered active. 3,752,441 limestone - 58,811 sandstone
- Mar 4, 1985 **Amendment of Notice of Intention increasing disturbed acres from 270 to 396 - roads included in operation area of industrial area.**
- April 11, 1985 Site inspection - Susan Linner and Tom Portle. Purpose of visit to begin the

process of permit finalization, noted the last acreage increase of 126 acres.

Company noted that the increased acreage would not be disturbed in near future. A overview on how Division processes permit applications and copy of Title 40-8 was given to Ideal at this time. Pictures of topsoil depths - ~14 inches and 2' plus of sub-soil. No drainage controls. Environmental concerns of visit - lack of topsoil management - wind blown fines - lack of sedimentation control.

- May 9, 1985 Mining and Reclamation Review - because of expected mine life a 5 year review process was recommended. Complete revegetation plan must be submitted before plan can be approved. Timetable for reclamation. Surety will depend on reclamation plan. Locate where overburden and waste rock will be placed. If possible regrade slopes. Describe drainage and erosion control and vegetation used for stabilization of waste piles. **Operator needs to identify and commit to demolition and removal of all structures prior to regrading and abandonment.** Baseline vegetation studies should be done if unsure of methods - test plots should be implemented. Exceptions to revegetation may be granted for areas of solid rock. Areas should be noted on reclamation map. Determine baseline soils in undisturbed areas and identify potential borrow areas to make up soils deficit. Indicated soil storage areas on map.
- June 14, 1985 Internal Memo from Dianne Nielson to Lowell Braxton stating that under rule 40-8-6 the Ideal plant would not qualify a chemical plant therefore constitute a portion of the operation to be regulated by the Division and a variance may be granted to Ideal. cc'd to Ron Daniels and Susan Linner
- Aug 28, 1985 Inspection Memo - Rick Summers and Dave Cline Onsite review to assess sedimentation and drainage control issues.
- Oct 29, 1985 Dave Cline's follow-up letter to inspection memo Requesting volumes of dust dump pile, repair of berms calculation demonstrating capacity of ephemeral drainage west of quarry #3.
- Mar 19, 1986 1985 Annual report - 27.9 acres of pit 11.0 acres of waste dumps working with Morgan County SCS to finalize revegetation information - 530,800 tons limestone - 8,200 sandstone
- Oct 16, 1986 Received Devils Slide reclamation plan. Variance request to exclude solid rock outcrop areas from revegetation.
- Nov 19, 1986 Mining and Reclamation Review comments (partial - no hydrology or engineering comments). Provide specific revegetation plan - provide test plot "as built" design. % vegetation cover not identified.
- Dec 18, 1986 Ideal internal memo of Division (Rick Summers, Randy Hardin, and David Cline) Site visit on Dec 16. Purpose of visit to check drainage areas and catch basins

included in mine permit application.

- Jan 15, 1987 Mining and Reclamation plan review comments (engineering and hydrology)
Operator should include affected and disturbed areas on reclamation map. Clearly indicate location and extent of reclamation and revegetation activities. Provide quantities, equipment cost for surety. Discussed hydrology concerns and if ponds were to be left they should be self draining. Also stated that the Division "has not issued approval for placement of spoil in the Weber River flood plain. Operation is dynamic process and therefore traditional sediment control measures may not be applicable.
- Feb 3, 1987 1986 Annual report - 30.0 acres of pit - 12.0 acres of waste dump. One test plot seeded on Oct 31, 1986, details included in Reclamation Plan - 495,698 limestone - 4,971 sandstone.
- May 8, 1987 Devils Slide Reclamation Plan received, this is a "stand on its own" plan requested by Susan Linner. Acreage to be disturbed - minesite 148.5 - Access/haul roads 15.8 - Associated on-site processing facilities ~25.
- Jul 23, 1987 Internal Memo - Susan Linner to Lowell - review completed by "B" team - complete enough to go to tentative approval. Two areas that needed to be addressed before finalization. (1) Division needed to determine the requirements for the bond, based on the proposed reclamation plan. (2) because of the anticipated long life, a stipulation - operator commits to providing a detailed reclamation design within the final 5 year permit term, within 180 days of start of reclamation.
Comments attached to memo - JRH - Division shall review and determine the surety during public notice. - because of length of life and unknowns of the ultimate post-mining and reclamation contours a five year term would be applied. LK - revegetation requirements - All revegetated acres will be mulched w/1500 lbs of wood-fiber and tackifier - RPS comment - prior to final approval demonstrated compliance to Rule M-10 (3) (13) flood and sediment control.
- Jul 28, 1987 Letter concerning Mining and Reclamation Plan to L.B. Giles - Tentative approval of plan issued with two remaining issues - Determine requirements for bond based on reclamation plan - Due to long life, the operator commits to providing detailed reclamation designs within final 5 year permit of within 180 days of start of activities.
- July 28, 1987 Notice of Tentative Approval for publication
- Aug 02, 1987 Affidavit of Publication
- Sep 22, 1987 Letter noting that no comments received. Division computed bond of \$198,000

Oct 05,1987 Revised bond estimate - because scarification of steep slopes are not feasible and **contractors equipment would be used for reclamation** - new bond \$141,000.

Nov 09,1987 Request to Board for concurrence on form and amount of surety. \$141,000 (1992\$) Executive summary - variances granted M-10(12) will not seed rock outcrops. 148.5 acres of land being disturbed. **Following operations all disturbed areas will be reshaped and reseeded (except for rock outcrops) and equipment, buildings and debris will be removed from the site.**

Jan 08,1988 1987 Annual Report - 79 acres unreclaimed - observing seed plots, will observe one more year. Reclamation will begin when areas become inactive. 538,720 tons limestone - 2,150 sandstone

Feb 22,1989 1988 Annual Report - 79 acres disturbed - continuing to monitor seed plot - 502,035 tons limestone - 4,710 sandstone

Jan 11,1990 1989 Annual Report - 79 acres disturbed - continue to monitor - 511,625 tons limestone - 6,425 sandstone

Mar 09,1990 Letters of transfer agreement and surety rider - transfer to Holnam Inc - parent co.

Mar 22,1990 Division permit transfer requests - transfer forms and reclamation contract

Jun 07,1990 Completed reclamation contract - 239 disturbed acres - completed transfer on Notice of Intention total disturbed in approved notice 390 acres - 239 acres disturbed to date.

July 09,1990 Request for Board concurrence of permit transfer. Included a Nov 3,1987 Reclamation Act Bond for \$141,000 (1992 \$) describing that 148.5 acres would be disturbed by this operation.

Jul 26,1990 Board hearing results - request for concurrence - signatures and request for a revised reclamation contract.

Sep 09,1990 Request from Holnam for current bond amount

Oct 03,1990 Completed reclamation contract. 239 total disturbed acres.

Oct 09,1990 Request for Board concurrence - Amount and form of replacement surety

Oct 25,1990 Final approval - permit transfer and amount & form of surety.

???? 1990 Annual report - 79 acres disturbed - monitoring seed plots - 566,075 tons

limestone - 5,570 sandstone

- Nov 27,1991 Copy of escalated reclamation surety amount. \$147,800 (1997 \$)
- Feb 04,1992 1991 Annual report - 79 acres disturbed. Soil substitute placed on fringe areas in anticipation of seeding - 583,570 tons limestone - 5,370 sandstone
- Mar 20,1992 Division letter stating that several errors would have to be corrected before the reclamation contract and surety could be submitted to the board.
- Apr 22,1992 Notice of final Board approval of form and amount of replacement surety.
- Jan 12,1993 1992 Annual report - 79 acres disturbed - Have placed soil substitute on fringe of quarry roads in anticipation of seeding - 531,945 tons limestone - 2,945 sandstone
- Aug 11,1993 Tony and Holland site inspection - Noted that an additional seed plot was scheduled to be in place. Discussed Holnam placing material into the Weber River. Noted that topsoil did not appear to salvaging soil.(Division will review approved plan for details regarding soil salvage) Issue of angle of repose dumps was discussed - operator intends to leave dumps at 1.5 to 1.8:1 and no attempt to reclaim these slopes. It was noted that Divisions current requirement is 2:1, without variance - which Holnam does not presently have. A variance was granted by the Division for a delay in revegetation and an assumed variance for the reclamation of quarry benches. However not indicated in the plan. Suggested a future meeting to discuss issues raised during inspection, and installation of additional seed plot. Memo also included a "Critical Area Treatment Recommendations" from Ideal. Covers steepness of slopes - recommended that continuing the test program.
- Jan 14,1994 1993 Annual report - 79 acres disturbed - 543,530 limestone - 5,975 sandstone
- Jan 16,1995 1994 Annual report - 79 acres disturbed - 530,623 limestone - 4,172 sandstone
- Jan 30,1996 1995 Annual report - 79 acres disturbed - 524,923 limestone - 3,894 sandstone
- Feb 03,1997 1996 annual report - 79 acres disturbed - 533,849 limestone - 975 sandstone
- Apr 11,1997 Letter from bonding company requesting info in new bond amount.
- May 29,1997 Replacement bonds from United Pacific Insurance Company.
- Jul 03,1997 E-mail from Tony stating that he had spoken to Susan (Holnam) and Virginia (Johnson & Higgins - surety company) about the present bond amount. He said that he could not give them an amount because the bond was due for reevaluation. This would require a site visit which could not take place until the end of July.

July 16,1997 Notice from St Paul Surety canceling the surety in 90 days.

Sep 3,1997 Site inspection memo - Tony and Lynn - noted that quarries #1 & #2 had not changed much since the last inspection. A new cement processing facility had been built and would be operational later in the year. Kiln dust area being regraded to 3:1 in anticipation of reclamation in the future. Site evaluation - surface disturbance had not changed much since last update - extent of surface facilities had changed and it was unknown if it was included in the mine plan at that time.

Sep 23,1997 Replacement surety bond calculation - \$177,600 (2002) - 1987 amount escalated to 2002 \$. Disturbed area 78.7 acres - demolition & removal of powderhouse and garage. **Cement plant structures and facilities were not considered mining facilities.**

Oct 28,1997 Formal approval of form and amount of replacement reclamation surety with reclamation contract - 239 acres disturbed - permitted area of 390 acres.

Jan 31,1998 1997 annual report - 79 acres disturbed - 483,625 tons limestone mined.

Feb 02,1999 1998 Annual report - 79 acres disturbed - 662,338 limestone - 19,239 sandstone

Feb 10,2000 1999 Annual report - 79 acres disturbed - 723,690 tons limestone - 30,234 sandstone

Sep 21,2000 Letter of stability concerns of Devils Slide Quarry bonding company.